## Letter of Support and Intent for the WWTF Research Project WHATIF

With this letter, I am most happy to express my support for the WWTF research project "Fast and Quantitative What-if Analysis for Dependable Communication Networks" (WHATIF) by Stefan Schmid (PI) and Jiri Srba (co-PI).

I think that the goal of the WHATIF project is highly ambitious: the growing complexity and criticality of communication networks calls for formal yet efficient means of giving guarantees of not only functional properties but also nonfunctional/quantitative properties. However, the project is also timely in the sense that the performance of model-based automated verification and analysis techniques during the last years (e.g. by combining model checking with machine learning) has reached a level of maturity that may now scale to the complexity of computer networks.

I am also happy to declare my intent of actively contributing to the WHATIF project with expertise on automated synthesis and optimization using the tool UPPAAL Stratego<sup>1</sup>, and by providing with supervision of 1 PostDoc (18 month). In total, I will allocate 10% of my time to this project if successful.

Yours sincerely

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1 www.uppaal.org

